

REMARKS

Claims 1-24 are pending in this application. No amendments are made.

Claim Rejections Under 35 U.S.C. §103 over Onomichi in view of Ito

Claims 1, 2, 4, and 13 stand rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent Application Publication No. 2001/0005278 (“Onomichi”) in view of U.S. Patent No. 6,699,580 (“Ito”). Applicants respectfully traverse the rejections.

The Advisory Action dated November 5, 2008 indicates that the Request for Reconsideration filed October 23, 2008 was entered, but the rejections of claims 1-24 were maintained.

The Advisory Action states in page 2, lines 2-3 that “[t]he instant application is drawn to a surfactant being provided on a transparent substrate film, not in the IR layer as argued.” This statement is incorrect. Claim 1 recites: “A near-infrared ray absorption film, characterized in that **a near-infrared ray absorption layer comprising a composition** containing a near-infrared ray absorbing dye having a maximum absorption in a range of 800 nm in wavelength to 1,200 nm in wavelength, and further containing a resin is provided on a transparent substrate film, **wherein a surfactant** having an HLB in a range of 2 to 12 is contained at 0.01% to 2.0% by mass **in the composition**.” As recited in claim 1, the near-infrared ray absorption layer (the IR layer) of the claimed film comprises a composition which contains a surfactant. Thus, the surfactant is in the IR layer in the claimed near-infrared ray absorption film, contrary to the statement in the Advisory Action.

The Advisory Action also states that “claim 13 does not claim the surfactant is in the organic solvent, only makes up an element of the coating solution of the IR layer.” See page 2, lines 6-7. In other words, the Advisory Action indicates that, in the process of claim 13, the surfactant is NOT in the organic solvent of the coating solution applied. Applicants respectfully disagree. Claim 13 recites, with emphasis added: “A process for preparing a near-infrared ray absorption film, characterized in that it comprises applying **a coating solution containing a** near-infrared ray absorbing dye, a resin, **a surfactant**, and **an organic solvent** on a transparent substrate film, followed by drying, to form a near-infrared ray absorption layer, wherein a surfactant having an HLB in a range of 2 to 12 is used as the surfactant, and this surfactant is

contained at 0.01% to 2.0% by mass, relative to a solid content of the coating solution.”

Applicants submit that the surfactant is soluble in the organic solvent recited in claim 13. Thus, the surfactant is in the organic solvent, not “only makes up an element of the coating solution of the IR layer.”

Ito discloses that the solvent in the dispersion liquid composition can be water alone or a solvent mixture of water and a water-compatible organic solvent (column 5, lines 30-32). Examples of the water-compatible organic solvents disclosed in column 5, lines 32-39, are **polar organic solvents**. Accordingly, the polysiloxane in Ito is soluble in water but has a low solubility in a **non-polar or hydrophobic organic solvent**. Ito discloses that it is desirable to employ a polysiloxane having a HLB (hydrophile-lipophile balance) value from 3 to 18 because when the HLB value is less than 3, the compatibility between water and the polysiloxane is not sufficient to achieve sufficient improvement in the coating property of the dispersion liquid. See col. 5, lines 47-53. Thus, the solubility of the polysiloxane in water is critical for the polysiloxane used in Ito. The polysiloxane used by Ito has a low solubility in hydrophobic organic solvents.

On the other hand, the IR layer of Onomichi uses a **hydrophobic organic solvent** such as toluene and does NOT contain water. See paragraphs [0183] and [0233]; Table 1. There would not have been any motivation or reasonable expectation of success to modify the IR layer of Onomichi, which uses a **hydrophobic organic solvent**, by adding a surfactant of Ito, which surfactant has a low solubility in the **hydrophobic organic solvent**. Further, the two reasons disclosed by Ito for using polysiloxanes with HLB value from 3 to 18, *i.e.*, (1) to improve water/polysiloxane compatibility and (2) to prevent foaming, do not apply to the IR layer of Onomichi, which uses a **hydrophobic organic solvent**, not water.

In addition, applicants have found, surprisingly, that when the near-infrared ray absorption layer comprises a surfactant having an HLB in the range of 2 to 12, not only the coatability is improved, but also the deterioration of the near-infrared ray absorbing dye caused by moisture is suppressed. See page 55, line 21 to page 56, line 15; page 57, line 25 to page 58, line 13 of the specification. The near-infrared ray absorbing dye of the present invention is weak in water. It was one of the objectives of the present invention to solve the problem of deterioration of the near-infrared ray absorbing dye due to moisture. Neither Onomichi nor Ito

teaches or suggests such an unexpected effect of a surfactant having an HLB in the range of 2 to 12 on suppressing deterioration of the near-infrared ray absorbing dye due to moisture.

For at least the reasons stated above, claims 1, 2, 4, and 13 would not have been obvious under 35 U.S.C. §103(a) over Onomichi in view of Ito. Withdrawal of the rejections is respectfully requested.

Claim Rejections of claims Under 35 U.S.C. §103 over Onomichi in view of Ito as applied to claim 1 and further in view of other references

Claims 3 and 9 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito as applied to claim 1 and further in view of U.S. Patent Application Publication No. 2002/0127395¹ (“Kuwabara”). Claim 5 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito as applied to claim 1 and further in view of Japanese Patent Application 2004-202899 (“Sato”). Claims 6 and 7 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito as applied to claim 1 and further in view of U.S. Patent No. 6,703,138 (“Taki”). Claim 8 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito as applied to claim 1 and further in view of U.S. Patent Application Publication No. 2003/0186040 (“Oya”). Claims 10 and 24 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito as applied to claim 1 and further in view of U.S. Patent Application Publication No. 2003/0021935 (“Moriwaki”). Claims 11 and 12 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito as applied to claim 1 and further in view of Japanese Patent Application 2003-127310 (“Kumano”). Applicants traverse the rejections.

For the reasons stated above, claim 1 is not obvious over Onomichi in view of Ito. The deficiency of Onomichi in view of Ito is not cured by any of Kuwabara, Sato, Taki, Oya, Moriwake, Kumano, and combinations thereof because none of them suggests to one of ordinary skill in the art to modify the near-infrared absorption filter of Onomichi with the polysiloxane disclosed in Ito. Claims 3, 5-9, 10-12, and 24 would not have been obvious under 35 U.S.C.

¹ Applicants have noted that US 2002/375766, as recited on page 4 of the Final Office Action, does not exist. Instead, US 2002/0127395 fits the description of Kuwabara.

§103(a) over Onomichi in view of Ito, or further in view of Kuwabara, Sato, Taki, Oya, Moriwake, Kumano, and combinations thereof. Withdrawal of the rejections is respectfully requested.

Claim Rejection Under 35 U.S.C. §103 over Onomichi in view of Ito as applied to claim 13 and further in view of other references

Claim 14 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito as applied to claim 13 and further in view of U.S. Patent No. 6,770,430 (“Kubo”). Claims 15 and 16 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito as applied to claim 13 and further in view of U.S. Patent Application Publication No. 2004/0071883 (“Ogawa”). Applicants traverse the rejections.

For the reasons stated above, claim 13 (and all claims dependent therefrom) is not obvious over Onomichi in view of Ito. The deficiency of Onomichi in view of Ito is not cured by any of Kubo and Ogawa at least because none of them suggests one of ordinary skill in the art to modify the near-infrared absorption filter of Onomichi with the polysiloxane disclosed in Ito. Therefore, withdrawal of the rejections is respectfully requested.

Claim Rejection Under 35 U.S.C. §103 over Onomichi in view of Ito and further in view of Kumano and other references

Claim 17 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito and further in view of Kumano. Claim 18 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito and in view of Kumano as applied to claim 17 and further in view of U.S. Patent No. 4,948,635 (“Iwasaki”). Claim 19 has been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito and in view of Kumano as applied to claim 17 and further in view of Ogawa. Applicants traverse the rejections.

For the reasons stated above, there would have been no motivation and no reasonable expectation of success to combine Onomichi and Ito to reach a process for preparing a near-infrared ray absorption roll using a coating solution containing, among other things, a near-infrared ray absorption dye and a surfactant, as recited in independent claim 17, and evidence of

the importance of the HLB range of 2 to 12 and the concentration range of 0.01% to 2.0% by mass is disclosed in the specification. The deficiency of Onomichi in view of Ito is not cured by any of Kumano, Iwasaki, Ogawa, and combinations thereof at least because none of them suggests one of ordinary skill in the art to modify the near-infrared absorption filter of Onomichi with the polysiloxane disclosed in Ito.

Therefore, withdrawal of the rejections is respectfully requested.

Claim Rejection Under 35 U.S.C. §103 over Onomichi in view of Ito and further in view of Iwasaki and other references

Claims 20 and 21 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito and further in view of Iwasaki. Claim 22 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito and in view of Iwasaki as applied to claim 20 and further in view of Ogawa. Claim 23 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Onomichi in view of Ito and in view of Iwasaki as applied to claim 20 and further in view of Kubo. Applicants traverse the rejections.

For the reasons stated above, there would have been no motivation and no reasonable expectation of success to combine Onomichi and Ito to reach a process for preparing a near-infrared ray absorption roll using a coating solution containing, among other things, a near-infrared ray absorption dye and a surfactant, as recited in independent claim 20, and evidence of the importance of the HLB range of 2 to 12 and the concentration range of 0.01% to 2.0% by mass is disclosed in the specification. The deficiency of Onomichi in view of Ito is not cured by any of Kumano, Iwasaki, Ogawa, and combinations thereof at least because none of them suggests one of ordinary skill in the art to modify the near-infrared absorption filter of Onomichi with the polysiloxane disclosed in Ito.

Therefore, withdrawal of the rejections is respectfully requested.

CONCLUSION

Applicants assert that all of the stated grounds of rejection have been properly traversed. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

In the event the filing of this paper is deemed not timely, Applicants petition for an appropriate extension of time. The petition fee, if needed, can be charged to Kenyon & Kenyon LLP's Deposit Account 11-0600. The Office is hereby authorized to charge any additional fees or credit any overpayments to Kenyon & Kenyon LLP's Deposit Account No. 11-0600.

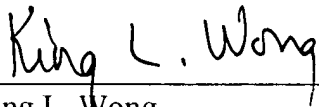
The Examiner is invited to contact the undersigned at the telephone number below to discuss any matter concerning this application.

Respectfully submitted,

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Date: November 21, 2008

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